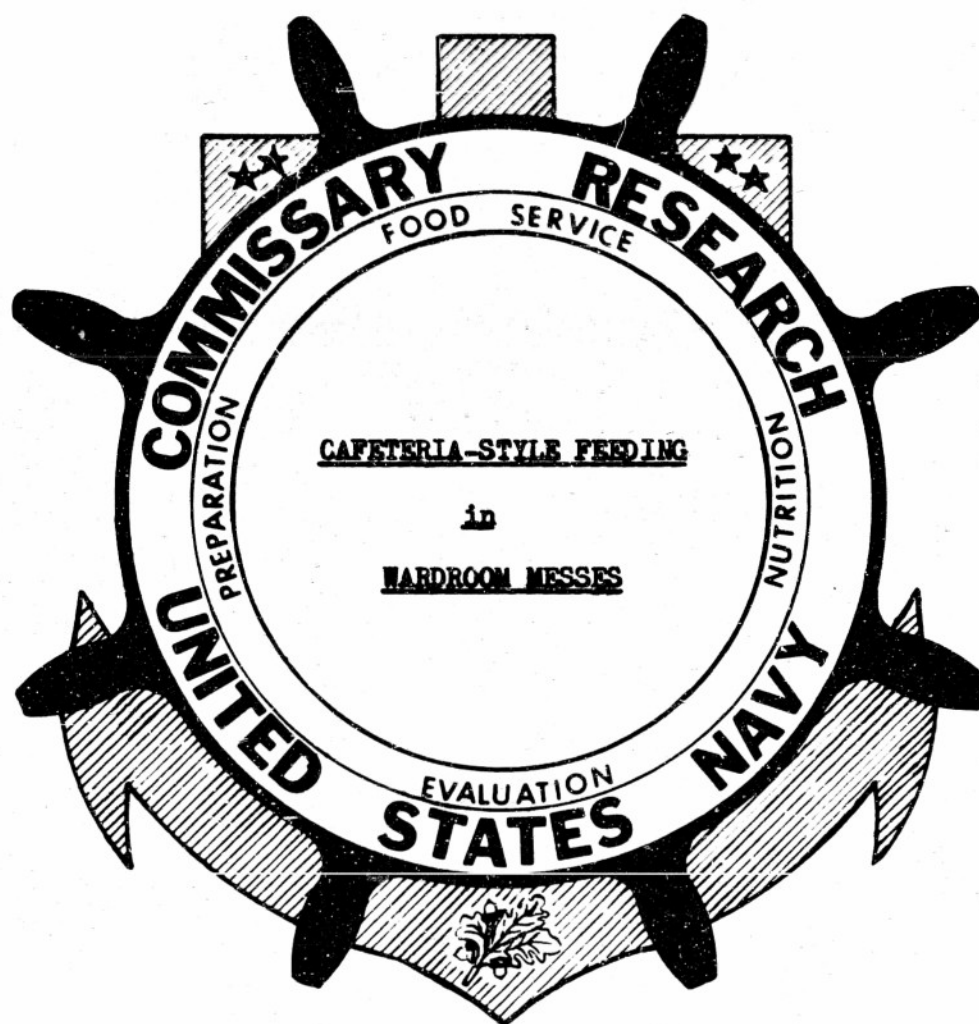


AD No. 12534

ASTIA FILE COPY

COMMISSARY RESEARCH DIVISION  
U.S. NAVAL SUPPLY RESEARCH AND DEVELOPMENT FACILITY  
BAYONNE, NEW JERSEY



Project NT002026 (CR53-81)  
Storage, Preparation and Service of Food Aboard Surface Craft  
19 March 1953

DEPARTMENT OF THE NAVY  
Bureau of Supplies and Accounts  
Washington 25, D. C.

In reply refer to

TECHNICAL REPORT REVIEW

**"CAFETERIA-STYLE FEEDING IN WARDROOM MESSSES"**

Project NT002026 (CR 53-81)  
"Storage, Preparation and Service of  
Food Aboard Surface Craft"  
19 March 1953

APPROVAL: Report approved 8 April 1953

SECURITY  
CLASSIFICATION: UNCLASSIFIED

DISTRIBUTION: In accordance with the attached approved distribution list.

REMARKS: This technical report review is inserted as the first page of the subject report as an integral part thereof.

No data, discussion or recommendations included in this research and development report or technical report review shall be construed as indicating a current or anticipated future operating policy of the Bureau of Supplies and Accounts or the Navy Department.

/s/ Herman Strock  
~~HERMAN STROCK~~  
Commander, (SC), USN  
Director, Research and Development Division  
By direction of the Chief of Bureau

RECOMMENDED DISTRIBUTION LIST

Chief of Naval Personnel, Research Division  
Chief, Bureau of Supplies and Accounts - Code W (7)  
Chief, Bureau of Supplies and Accounts - Code S10 (2)  
Chief, Bureau of Supplies and Accounts - Code L2, Navy Dept., Washington,  
25, D. C. (1)  
Chief, Bureau of Medicine and Surgery, Navy Dept., Washington 25, D. C. (1)  
Chief, Bureau of Ships - Code 533 (1)  
Chief of Naval Research, c/o Technical Information Division, Library of  
Congress, Washington 25, D. C. (1)  
Provisions Supply Office, Naval Gun Factory, Washington, D. C. (5)  
Navy Provisions Liaison Officer, Q. M. Food and Container Institute,  
1849 West Pershing Road, Chicago 9, Ill. (2)  
Chief, Research & Development Branch, Military Planning Division Office of  
the Quartermaster General, Dept. of the Army, Washington 25, D.C. (1)  
Commanding General, Wright Air Development Command, Wright Patterson Air  
Force Base, Dayton, Ohio (Attn: WCSNM-5) (1)  
ComAirLant, c/o Fleet Post Office, New York, N.Y. (1)  
ComAirPac, c/o Fleet Post Office, San Francisco, California (1)  
Commander, Military Sea Transportation Service, Department of the Navy,  
Washington 25, D. C. (1)  
Commandant, U. S. Marine Corps., Washington 25, D. C. Attn: Research and  
Development Section (1)  
Director of Research & Development, Deputy Chief of Staff, Development  
Dept. of the Air Force, Washington 25, D. C. (1)

COMMISSARY RESEARCH DIVISION  
U.S. NAVAL SUPPLY RESEARCH AND DEVELOPMENT FACILITY  
BAYONNE, NEW JERSEY

CAFETERIA STYLE FEEDING

IN

WARDROOM MESSSES

Project NT002026 (CR 53-81)  
Storage, Preparation and Service of Food Aboard Surface Craft  
19 March 1953

## TABLE OF CONTENTS

### PART I

BACKGROUND INFORMATION AND CONDITIONS OF STUDY .....	1
OBJECTIVE .....	1
CONCLUSIONS .....	2
RECOMMENDATIONS .....	3
INTERPRETATION OF PLANS .....	4

### PART II

FIGURE I	- Galley, 3rd Deck .....	
FIGURE II	- Pantry, Serving Area and Scullery, 2nd Deck .....	
FIGURE III	- Plan A, Temporary Conversion to Cafeteria-Style Feeding .....	
FIGURE IV	- Plan B, Proposed Permanent Conversion Plan, Combining the Galley, Scullery and Service Operations into the Present Pantry Area on the 2nd Deck, Adjacent to the Wardroom .....	
FIGURE V	- Clean Dish Table .....	
FIGURE VI	- Galley Work Table .....	
FIGURE VII	- Service Counter with Lowerators .....	
FIGURE VIII	- Cold Pan with Refrigerated Base Table .....	
FIGURE IX	- Salad and Sandwich Preparation Unit .....	
FIGURE X	- Plan C, Rearrangement of Present Galley Facilities on 3rd Deck	

## BACKGROUND INFORMATION AND CONDITIONS OF STUDY

In response to a request from the Commanding Officer of an Essex Class CVA Carrier for assistance in the conversion of the present table service to cafeteria-style service in the wardroom mess, this study was made. The conversion was considered to be necessary due to a present and anticipated further shortage of stewardsmen in relation to the number of officers on board.

The following operational features of the mess and administrative desires were to be considered in the development of the plans:

1. Facilities for a maximum of 250 officer personnel to be provided.
2. Existing equipment to be used insofar as considered suitable.
3. Bakery products to be purchased from the general mess and the bulk of the vegetable preparation accomplished in the general mess vegetable locker. Future mess planning also provides for the more extensive use of fresh frozen fruits and vegetables. Thus, extensive facilities in these preparation areas are not required.
4. All food service to be allocated to the serving line with the exception of butter, coffee cream and condiments.
5. All mess operations to be confined to one deck, if feasible.
6. The food service facility to be equipped and arranged to efficiently supply short orders, sandwiches and other special odd hour meals, occasioned by operational exigencies, in addition to normal meal period operations.

## OBJECTIVE

To develop suitable plans for cafeteria-style feeding in the wardroom mess aboard an Essex Class CVA Carrier; the completed plans to fulfill the following basic requisites:

1. A temporary conversion plan requiring a minimum of changes and additions to existing facilities and which may be implemented immediately.

2. Permanent conversion plans reflecting the most desirable and efficient selection and arrangement of equipment in relation to the various food service demands pertinent to the class vessel concerned; and the more economical and efficient utilization of space and manpower for present table service and cafeteria-style service.

### CONCLUSIONS

On the basis of the proposals submitted in this report as Plans A, B, and C, it is concluded that:

1. Plan A (Figure III) may be put into immediate operation with an approximate expenditure of \$4,500.00; labor requirements are reduced from 45 stewardsmen to 22 stewardsmen; rearrangement and modification of equipment, as indicated, provides the flexible food service requirements for special meal operations.
2. Plan B (Figure IV) requires the complete alteration of the pantry area but combines the entire galley, scullery and food service operations into the one former pantry area on the second deck; thus providing a compact, flexible arrangement which may be utilized equally as effectively for the normal table service or cafeteria-style service as desired. In addition, the following advantages result:
  - a. The release of approximately 600 sq. ft. of galley space on the third deck for other purposes.
  - b. A farther reduction of two personnel in galley labor requirements.
  - c. The elimination of the weighty, space consuming, hazardous, and unsanitary "dumb waiter" and shaft between the second and third decks.
  - d. The provision for the equipment and line station spaces necessary to efficiently fulfill the short order, sandwich, and special meal requirements.
  - e. Savings in food waste and deterioration and a reduction in heat and moisture dissipation to the galley will be realized through the use of the compartmented, dry heat, thermostatically controlled hot food service table.

- f. Through the utilization of additional items of progressive equipment, i.e., lowerators, silver washer and drier, pre-rinse device, glass washer, refrigerated pantry table, etc., further savings in labor and materials, reduction in service time and increased sanitation will result.
  - g. The mess officer and chief steward are enabled to exercise proper and more efficient control and supervision over all food supplies, preparation and service which should result in further monetary savings.
3. Plan C (Figure V) represents a more efficiently arranged and equipped present third deck galley.

#### RECOMMENDATIONS

It is recommended that:

1. Plan A be implemented aboard an Essex Class CVA Carrier at present to determine its practicality and advantages in the potential temporary conversion by other Essex Class vessels to cafeteria-style service when such type of service should be considered desirable and/or necessary.
2. The relative merits of Plan B, either in its entirety or component parts, be given adequate evaluation for use in future wardroom mess planning or present modification aboard Essex Class CVA Carriers to make the present family style feeding more efficient and to make facilities available for situations that demand cafeteria-style feeding.
3. Plan C be considered for improving the efficiency of the present galley arrangement and selection of equipment.



## INTERPRETATION OF PLANS

### FIGURE I - Galley, 3rd Deck

Present arrangement of existing equipment

### FIGURE II - Pantry, serving area, and scullery, 2nd deck

Present arrangement of existing equipment

### FIGURE III - Plan A, Temporary conversion to cafeteria-style feeding

#### 1. Rearrangement of existing pantry equipment:

- a. The rearrangement of work tables, refrigerators and elements of the serving line as indicated, establishes the stations required for cafeteria-style service. In addition, the short order and sandwich stations have been provided with their respective refrigerators, providing for easy access to supplies. In order to provide adequate dresser service space and working implements, the following modifications and additions to the serving line have also been made:

- (1) Coffee service has been moved to the wardroom.
- (2) The toaster is stowed on work table (item 2) except for the breakfast meal.
- (3) A 4-hole section at the end of the steam table (item 9) has been covered with a solid removable top, providing dresser working space for the short order station (item 8) and soup station.

The remaining steam table sections provide adequate spaces for the normal number of meal components. (Foods should be supplied to the steam table in as small quantities as practicable to maintain their attractiveness and palatability and to prevent excessive deterioration). An efficient communication system between the galley and serving area is required.

(4) Salad and dessert display units, specifications:

30" x 30" x 25-1/2" high  
3 - shelf, 14 gauge stainless steel with 1/2"  
top roll edges, 7-1/2" between shelves.  
Frame: 1" stainless steel pipe legs and shelf  
supports.  
Capacity of each unit: 50 salad and dessert plates.

2. Wardroom arrangement:

- a. Soiled mess gear receiving tables with stainless steel dish trays are required for the wardroom and are located equidistant along the port bulkhead. Full dish trays are transported from tables to scullery.
- b. Folding tray stands are to be located conveniently throughout the wardroom to receive empty trays as officers arrive at their respective tables.
- c. All beverage service is allocated to the wardroom as there is not sufficient space on the serving line.

3. Labor requirements:

- a. Stewardsmen are assigned as follows:

Galley - 2  
Serving area - 6 (Dinner and supper meals)  
Scullery - 2  
Wardroom - 12

4. Additional equipment and gear required:

250 - 18" x 14" trays  
16 - Folding tray stands  
4 - Mess gear tables (G-26-F-12897-60)  
1 - Tray and silver storage table (G-26-T-12897-36)  
18 - Stainless steel dish trays (15-1/2" x 23" x 5" deep)  
1 - 18" x 24" cutting board (64-B-680)  
1 - 12" x 18" cutting board (64-B-610)  
350 - Plasticware 12 oz. bowls (63-P-590)  
350 - Plasticware 12 oz. coffee mugs (63-P-598)

or

350 - General use bowls 5-3/4" (63-C-895)

350 - Coffee cups 3-3/4" (63-C-1420)

5. General Comments:

- a. The proper indoctrination into cafeteria-style service and subsequent supervision of stewardsmen is of vital importance. Pre-planning of the food arrangement and continual supply for the service line, in addition to proper instruction in the serving of steam table items, will insure a progressive, smooth flow of foods to personnel.
- b. The slicing of roasts, i.e., baked ham, roast beef, roast pork, meat loaf, etc. on the line at meal time, when possible, would increase the palatability of the meat and provide a medium of extra service.

FIGURE IV - Plan B. Proposed, permanent conversion plan, combining the galley, scullery and service operations into the present pantry area on the 2nd deck, adjacent to the wardroom.

1. General Specifications:

- a. All tables and operating equipment along bulkheads, except items 1, 7 and 37, shall be provided with #14 gauge stainless steel, 10" splashbacks, integrally welded to the fixtures. Figure V (items 12 and 12a) illustrates example specifications for fabricated tables.
- b. All tables and operating equipment to be provided with 8" adjustable legs, allowing for 34" to 35" working height, with the exception of the following items of equipment which are to be set in mastic:

Deep Fat Fryer (item 4)  
Ranges (item 5)  
Refrigerators (item 9)  
Bake and Roast Oven (item 7)  
Mixer (item 37)

- c. Figure VI (item 36) galley work table (cook's). Overhead bins are for spices, shelf storage under for line inserts and pans. Hardwood cutting boards to be provided.
- d. The serving line, from item 20 to 33, to be an integrally constructed unit. Reference is made to Catalog No. 501, Duke Manufacturing Company, St. Louis 6, Mo., for example specifications. Figure VII indicates the features of the hot food line with in-counter dish lowerators. The standard 12" x 20" openings are fitted with interchangeable top plates, allowing for the flexibility of capacity and arrangement of foods.
- e. Item 23, electric griddle with stand, Hotpoint Model HGG47 with twin automatic temperature controls and the following load capacity:
  - 48 - Eggs, fried or scrambled
  - 48 - 3 oz. hamburgers
  - 36 - 7 oz. tenderloin steaks
  - 28 - 4" hot cakes

Stand: 35-1/2" wide x 20-1/8" deep x 25-3/16" high  
with plate storage below.
- f. Item 16, glass washer, Cunningham Model 1-0, with four rinse racks; capacity 600 glasses per hour.
- g. Item 18, silver washer and drier, Foley-Irish Model A-7, capacity 200 pieces of silver per load or 2800 pieces per hour.
- h. Item 38, tray stand and lowerator, American Foundry and Machinery Co. Model 1418, capacity approximately 200 trays.
- i. Item 33, Figure VIII, refrigerated salad display unit. Refrigerated salad storage below; overhead shelves may be provided to increase capacity.
- j. Item 34, Figure IX, refrigerated salad and sandwich preparation unit.

2. Additional equipment required:

- a. The following items are required for the hot food table:  
(Refer to Duke Manufacturing Co. Catalog No. 501)

- 5 - No. 6 Senior Top Plates
- 2 - No. 8 Senior Top Plates
- 2 - No. 0 Senior Top Plates
- 2 - No. H Senior Top Plates
- 6 - No. 531 St. St. Pans, 2-1/2" depth
- 3 - No. 532 St. St. Pans, 4" depth
- 3 - No. 533 St. St. Pans, 6" depth
- 6 - No. 521 St. St. Inserts, 10-1/2"
- 4 - No. 522 St. St. Inserts, 8-1/2"
- 8 - No. 523 St. St. Inserts, 9"
- 3 - No. 549 St. St. Soup Tureens w/ covers
- 1 - No. 530 St. St. Roll basket

b. The following items are necessary for auxiliary operations:

Meat Slicer, Hobart Model 410, 10" diameter blade

Vegetable peeler, portable, Superior, Catalog No. S-12, capacity, 6 lbs. per minute.

3. General Comments:

a. The following alterations are required:

- (1) Remove dumb waiter and shaft between 2nd and 3rd decks.
- (2) Remove a section of passageway after bulkhead, between wardroom and galley, sufficient to allow line service opening from item 20 to 33.
- (3) Remove section of passageway forward bulkhead, between wardroom and galley, to provide line entrance to wardroom, thus avoiding congestion between wardroom and scullery through dish bussing operations by stewardsmen and entrance of line.

b. The wardroom arrangement and accessories are the same as used with Plan A and wardroom labor requirements are also the same. However, since cafeteria service will reduce the requirement for seats by approximately 30% below that required for table service, the number of tables can be reduced, thus further reducing the labor force required for the wardroom.

c. It is recognized that certain items of equipment and equipment capacities do not conform to General Specification for Building Vessels of the United States Navy. Selection, ar-

1

rangement, and capacities of the equipment indicated have been predicated on the latest accepted good commercial planning procedures. The proposed wardroom operation would be commensurate in these respects with those of many good commercial installations with an equal or higher volume of business.

FIGURE X - Plan C, Rearrangement of present galley facilities on 3rd deck.

1. This plan provides the more orderly and efficient arrangement and selection of equipment and utilization of space to insure a smooth flow of foods to the dumb waiter (item 7).

**PART II**

**FIGURES I - X**

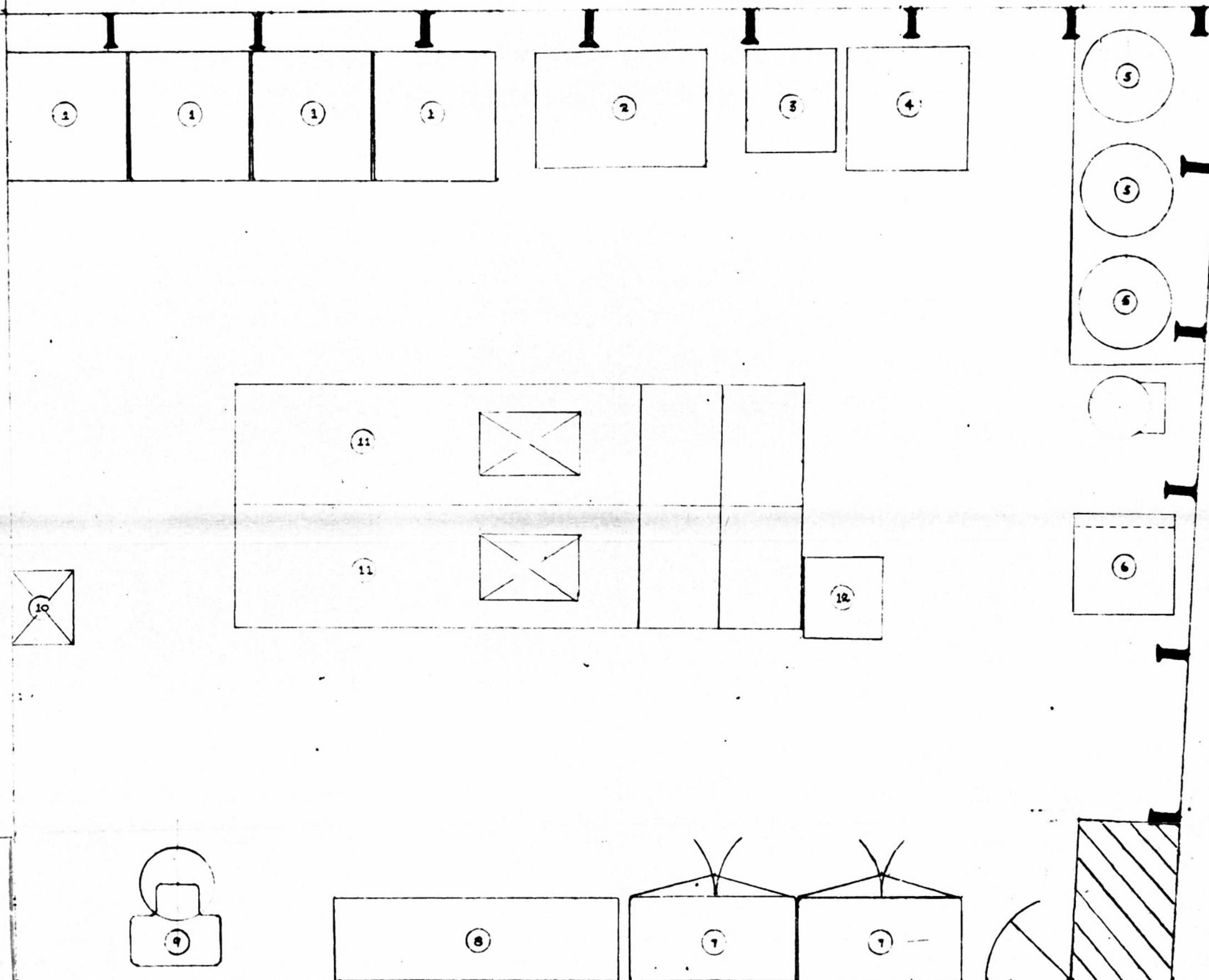


FIGURE I

EQUIPMENT		SCHEDULE	
SYN	QTY	SYN	QTY
1	4	7	2
2	1	8	1
3	1	9	1
4	1	10	1
5	3	11	2
6	1	12	1
RANGE W/OVEN		REFRIGERATOR	
POT RACK		WORK TABLE	
DEEP FRYER 60 LB		MIKER - 60 QT	
ROAST OVEN - 3 DECK		UTILITY SINK	
40 GAL. SINK		WORKTABLE W/SINK	
DUMB WAITER		HEAT BLOCK	

ESSEX CLASS CVA CARRIER

PRESENT WARDROOM GALLEY

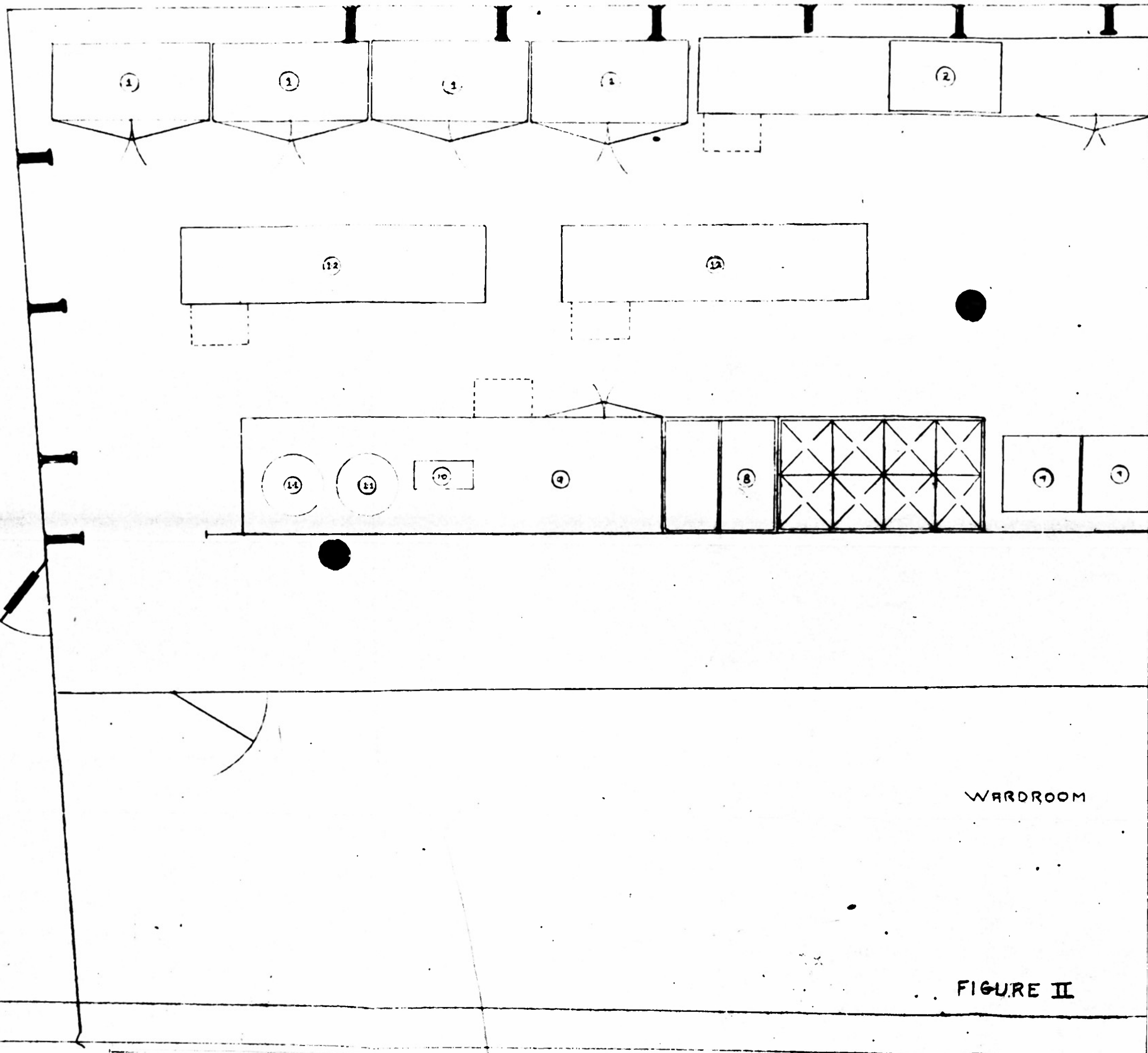
THIRD DECK

SCALE APPROX. 1/8" TO 1 FT



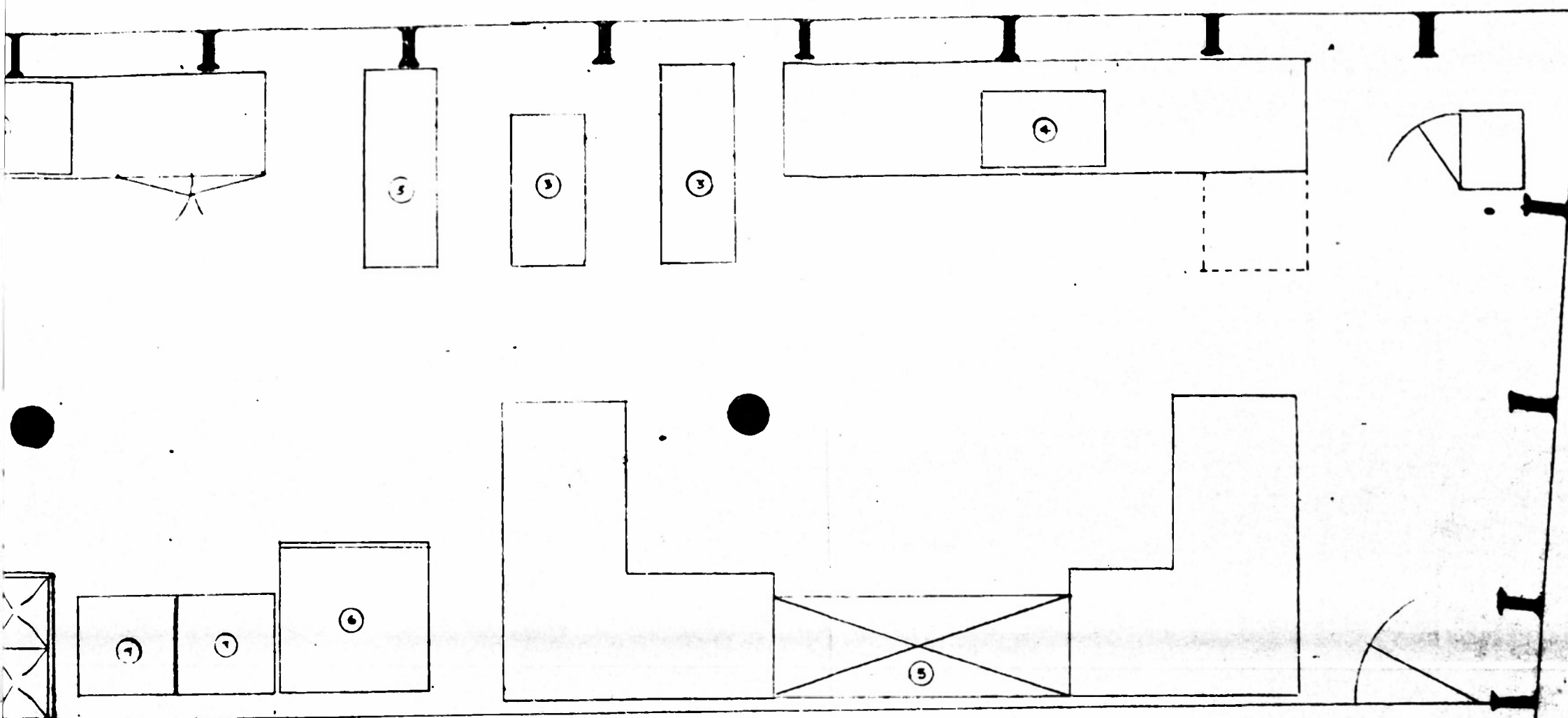
1

STRB



WARDROOM

FIGURE II



WARDROOM

ESSEX CLASS CVA CARRIER		
PRESENT WARDROOM PANTRY AND SERVING AREA		
SECOND DECK		
EQUIPMENT SCHEDULE		
SYM	QTY	DESCRIPTION
1	4	REFRIGERATOR
2	1	UTILITY SINK W/ DRAIN TOP
3	3	CLEAN DISH STORAGE RACK
4	1	POT SINK W/ DRAIN TOP
5	1	DISHWASHER W/ TABLES
6	1	FOOD ELEVATOR
7	2	GRILLS
8	1	STEAM TABLE
9	1	DEESSER
10	1	TOASTER
11	2	COFFEE URN
12	2	WORK TABLES
SCALE: 1/8" = 1'-0"		

STRB

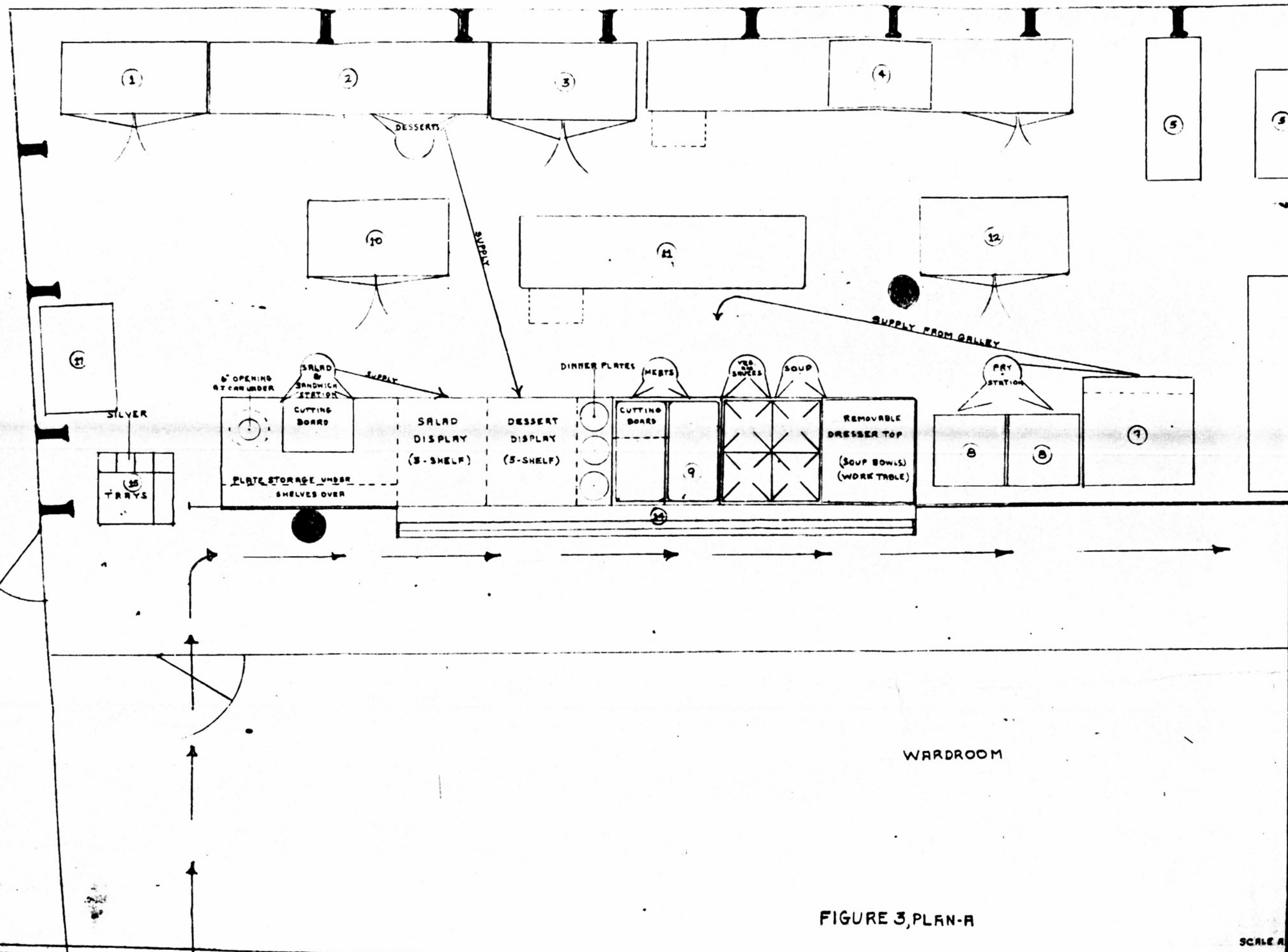


FIGURE 3, PLAN-A

SCALE A



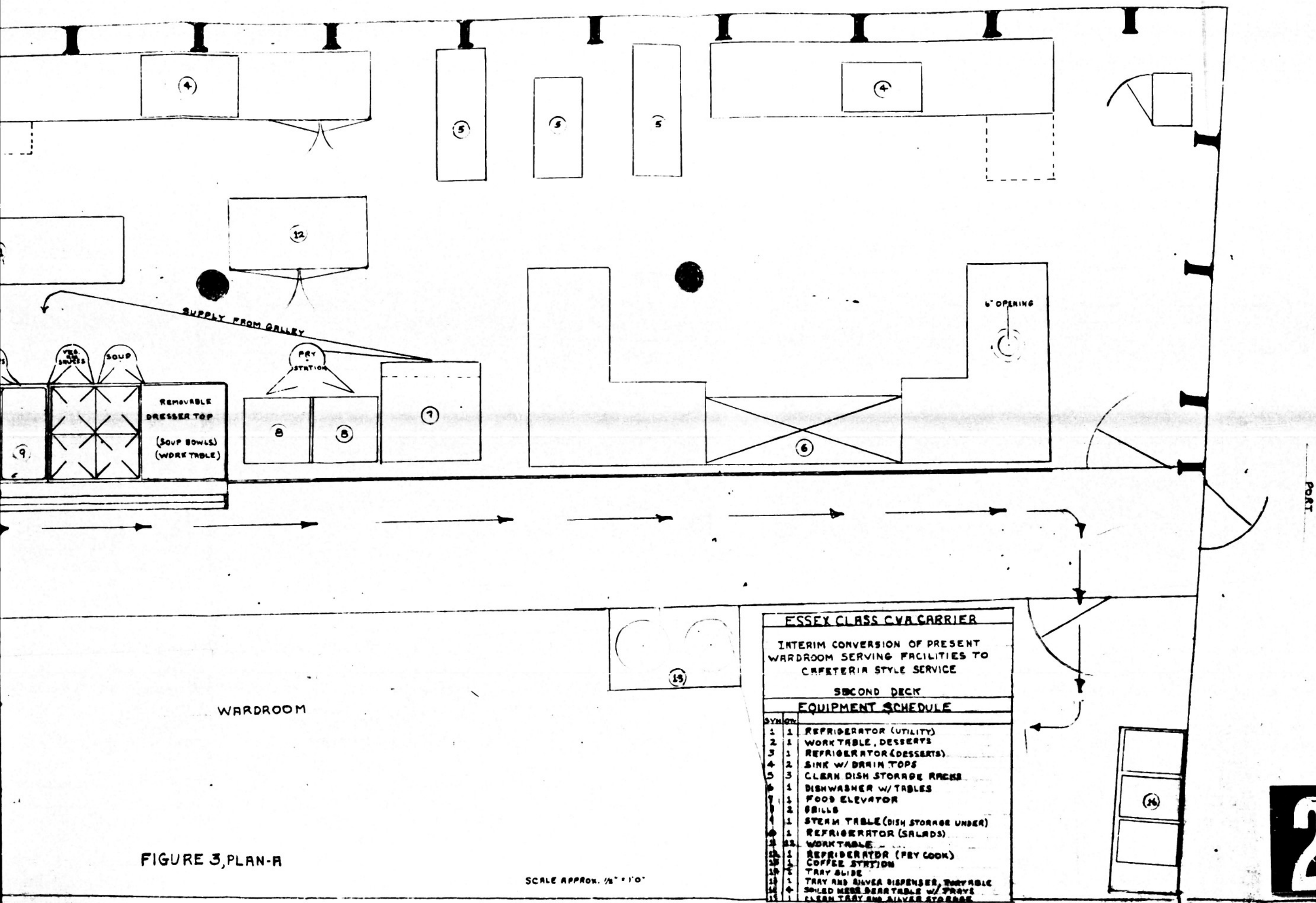


FIGURE 3, PLAN-A

SCALE APPROX. 1/8" = 1'0"

ESSEX CLASS CVA CARRIER		
INTERIM CONVERSION OF PRESENT WARDROOM SERVING FACILITIES TO CAFETERIA STYLE SERVICE		
SECOND DECK		
EQUIPMENT SCHEDULE		
SYMBOL	QTY	DESCRIPTION
1	1	REFRIGERATOR (UTILITY)
2	1	WORK TABLE, DESSERTS
3	1	REFRIGERATOR (DESSERTS)
4	2	SINK W/ DRAIN TOPS
5	3	CLEAN DISH STORAGE RACKS
6	1	DISHWASHER W/ TABLES
7	1	FOOD ELEVATOR
8	2	GRILLS
9	1	STEAM TABLE (DISH STORAGE UNDER)
10	1	REFRIGERATOR (SALADS)
11	12	WORK TABLE
12	1	REFRIGERATOR (FRY COOK)
13	2	COFFEE STATION
14	2	TRAY SLIDE
15	1	TRAY AND SILVER DISPENSER, TRAY TABLE
16	4	SOILED MESS DEAR TABLE W/ TRAYS
17	1	CLEAN TRAY AND SILVER STORAGE



STDD

REF

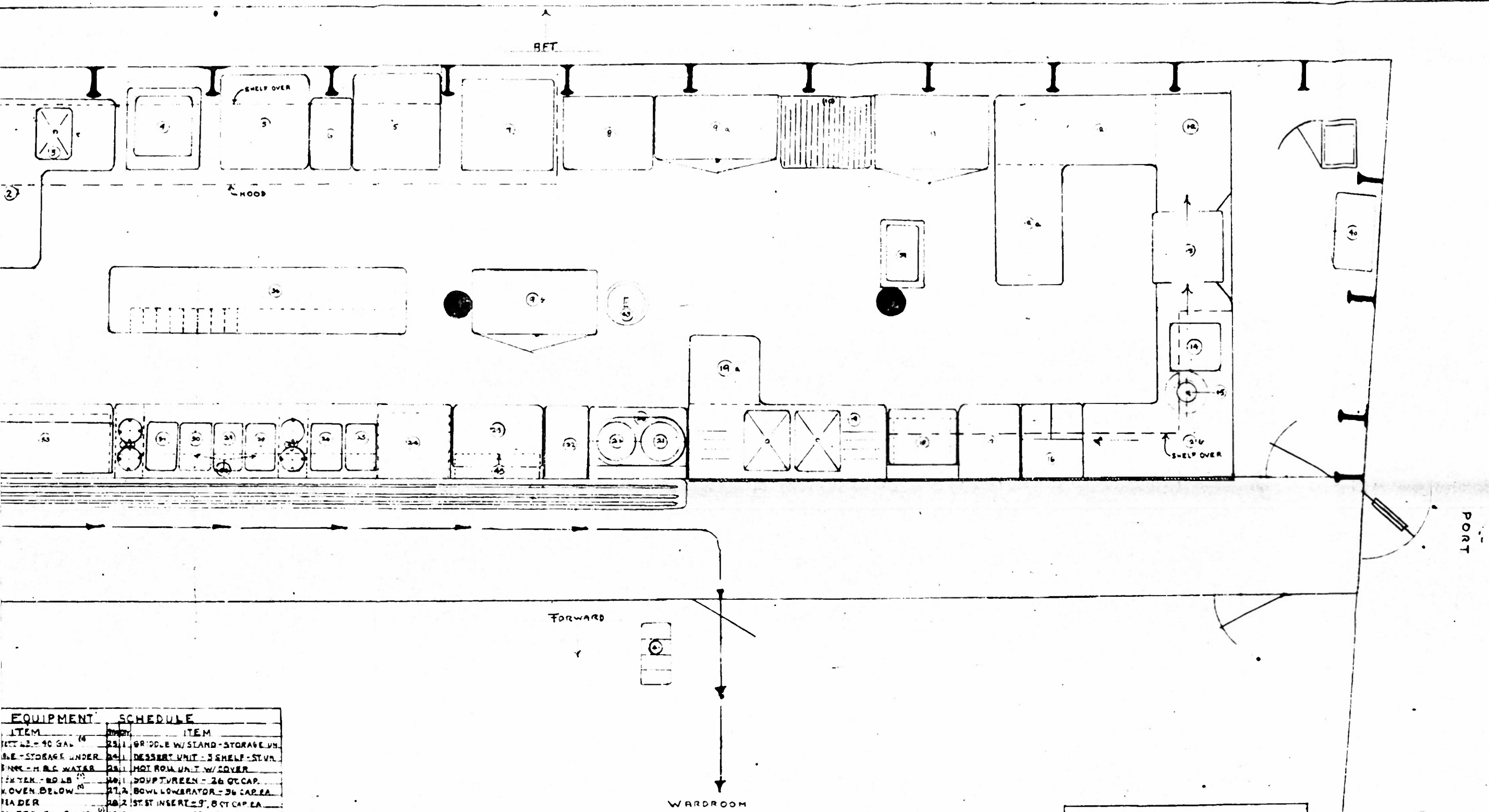
FORWARD

WARDROOM

EQUIPMENT SCHEDULE			
ITEM	QTY	ITEM	QTY
1. STEAM KETTLE - 90 GAL.	(1)	25.1. GRIDDLE W/ STAND - STORAGE UN.	(1)
2. WORK TABLE - STORAGE UNDER	(1)	26.1. DESSERT UNIT - 3 SHELF - ST. UN.	(1)
3. UTILITY SINK - H & C WATER	(1)	27.1. HOT ROLL UNIT W/ COVER	(1)
4. DEEP FAT FRYER - 60 LB.	(1)	28.1. SOUP TUREEN - 26 QT. CAP.	(1)
5. RANGE W/ OVEN BELOW	(1)	29.1. BOWL LOWERATOR - 36 CAP. EA.	(1)
6. ST. ST. SPREADER	(1)	30.1. ST. ST. INSERT - 5' 8 QT. CAP. EA.	(1)
7. BAKE & ROAST OVEN - 3 DECK	(1)	31.1. MEAT PAN, 12X20X8, 22 QT. CAP.	(1)
8. 5' ST. WORK TABLE - STOR. BELOW	(1)	32.1. PLATE LOWERATOR - 60 CAP. EA.	(1)
9. COOK'S REFRIGERATOR - 18 CU. FT.	(1)	33.1. REFRIG. SALAD DISPLAY UNIT	(1)
10. UTENSIL STORAGE RACK	(1)	34.1. REFRIG. PANTRY PREP. UNIT	(1)
11. DRY PROV. STORAGE - 48 CU. FT.	(1)	35.1. TRIP & BAR ST. ST. TRAY SLIDE - 12"	(1)
12. CLEAN DISH TABLE	(1)	36.1. WORK TABLE - BINS UNDER	(1)
13. CLEAN DISHES - ENCL. STORAGE UNDER	(1)	37.1. MIXER - 60 QT.	(1)
14. SOILED DIRT TABLE - RACKS UNDER	(1)	38.1. PANTRY REFRIGERATOR - 18 CU. FT.	(1)
15. DISHWASHER - SINGLE TANK	(1)	39.1. TRAY STAND W/ LOWERATOR - 200 CAP.	(1)
16. PRE-RINSE SPRAY W/ TRAY UNIT	(1)	40.1. ST. ST. BUS. CART W/ WHEEL DRAKE	(1)
17. SCRAPPING UNIT - 61 CAN UNDER	(1)	41.1. GEAR LOCKER	(1)
18. GLASS WASHER - 2 BRUSH	(1)	42.1. SILVER DISPENSER	(1)
19. ST. ST. WORK TABLE - STOR. UNDER	(1)	43.1. PANTRY UTILITY SINK	(1)
20. SILVER WASHER & DRYER	(1)	44.1. 90 L. CAN	(1)
21. POT & VEG. SINKS - DRAINS	(1)	45.1. FRY ST. ON REFRIGERATOR - 180 CAP.	(1)
22. WORK TABLE - ENCL. STOR. UNDER	(1)	46.1. SERVING SHELF - 10" WIDE, HT. 16"	(1)
23. URN STAND - OPEN STORAGE UNDER	(1)		
24. COFFEE URN - 4 GAL.	(1)		
25. ST. ST. WORK TABLE - STORAGE UNDER	(1)		

(1) EXISTING EQUIPMENT

FIGURE IV, PLAN 'B'



EQUIPMENT	SCHEDULE
ITEM	ITEM
1. 40 GAL	23.1. GRIDDLE W/ STAND - STORAGE UN.
2. 40 GAL	24.1. DESSERT UNIT - 3 SHELF - STVL
3. 40 GAL	25.1. HOT ROM UNIT W/ COVER
4. 40 GAL	26.1. DOUP TUREEN - 26 QT CAP.
5. 40 GAL	27.2. BOWL LOWERATOR - 36 CAP. EA.
6. 40 GAL	28.2. 1ST INSERT - 9" 8 QT CAP. EA.
7. 40 GAL	29.2. 19" 8 SA. 18 QT CAP.
8. 40 GAL	30.1. HEAT PAN, 12X22X8, 22 QT CAP.
9. 40 GAL	31.1. PLATE LOWERATOR - 40 CAP. SA.
10. 40 GAL	32.1. REFRIG. SALAD DISPLAY UNO.
11. 40 GAL	33.1. REFRIG. PANTRY PREP. UNIT
12. 40 GAL	34.1. TRIPLE BAR ST. ST. TRAY SLIDE UNO.
13. 40 GAL	35.1. WORK TABLE - 8' X 12' UNO.
14. 40 GAL	36.1. MIXER - 40 QT
15. 40 GAL	37.1. PANTRY REFRIGERATOR - 18 CU FT
16. 40 GAL	38.1. TRAY STAND W/ LOWERATOR - 2000
17. 40 GAL	39.1. 1ST BUS CART W/ WHEEL BRAKE
18. 40 GAL	40.1. GEAR LOCKER
19. 40 GAL	41.1. SILVER DISC RACK
20. 40 GAL	42.1. PANTRY UTILITY SINK
21. 40 GAL	43.1. 0.1 CAN
22. 40 GAL	44.1. FRY STATION REFRIGERATOR - 18
23. 40 GAL	45.1. SERVING SHELF - 10' WIDE, HT. 10"
24. 40 GAL	46.1. SERVING SHELF - 10' WIDE, HT. 10"
25. 40 GAL	47.1. SERVING SHELF - 10' WIDE, HT. 10"
26. 40 GAL	48.1. SERVING SHELF - 10' WIDE, HT. 10"
27. 40 GAL	49.1. SERVING SHELF - 10' WIDE, HT. 10"
28. 40 GAL	50.1. SERVING SHELF - 10' WIDE, HT. 10"
29. 40 GAL	51.1. SERVING SHELF - 10' WIDE, HT. 10"
30. 40 GAL	52.1. SERVING SHELF - 10' WIDE, HT. 10"
31. 40 GAL	53.1. SERVING SHELF - 10' WIDE, HT. 10"
32. 40 GAL	54.1. SERVING SHELF - 10' WIDE, HT. 10"
33. 40 GAL	55.1. SERVING SHELF - 10' WIDE, HT. 10"
34. 40 GAL	56.1. SERVING SHELF - 10' WIDE, HT. 10"
35. 40 GAL	57.1. SERVING SHELF - 10' WIDE, HT. 10"
36. 40 GAL	58.1. SERVING SHELF - 10' WIDE, HT. 10"

FIGURE IV, PLAN 'B'

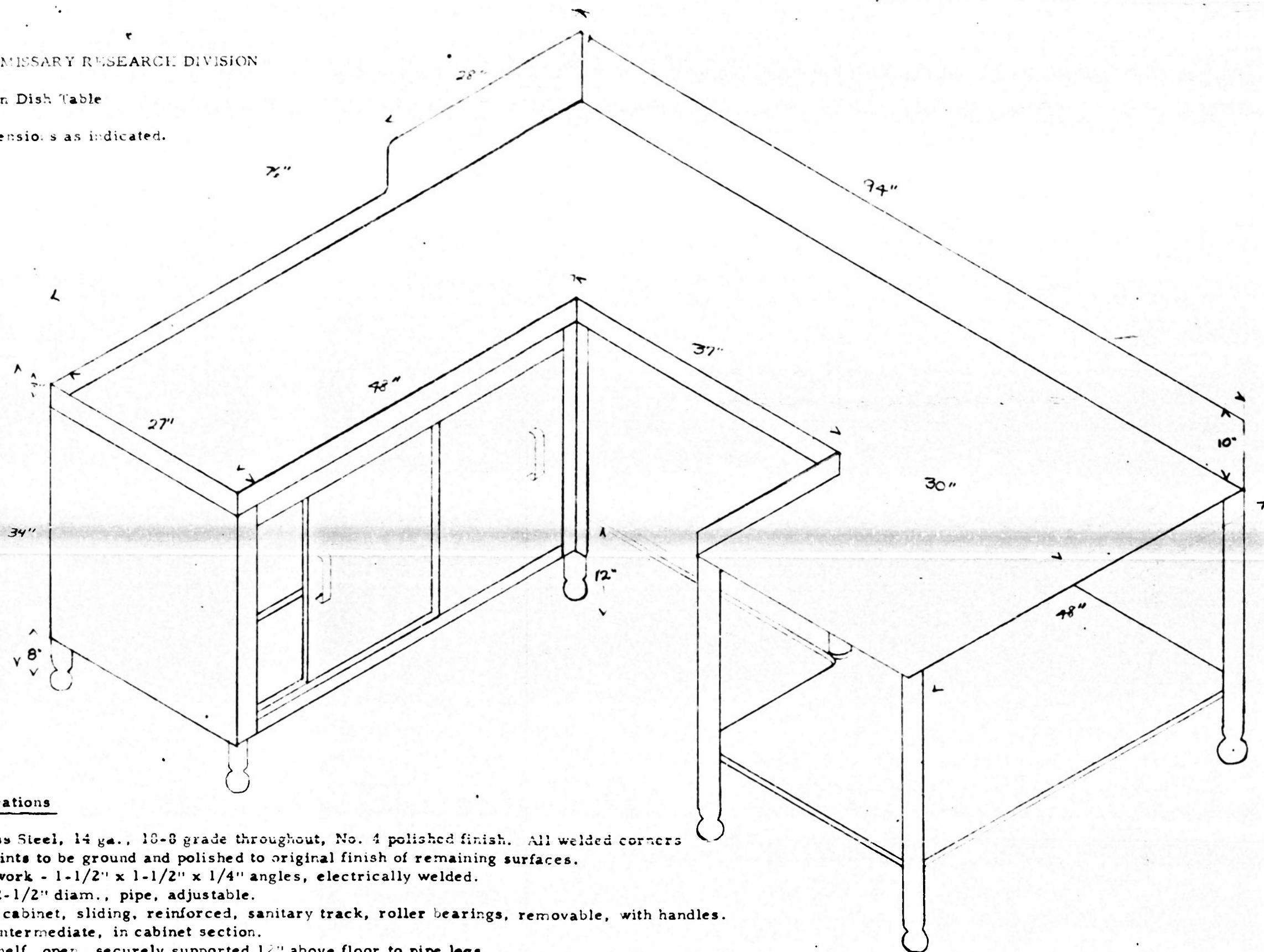
DEPARTMENT OF THE NAVY  
BUREAU OF SUPPLIES & ACCOUNTS  
ESSEX CLASS CVA CARRIER  
PROPOSED, COMBINED, WARDROOM, GALLEY,  
SCULLERY AND SERVING AREA PLAN  
SECOND DECK  
U.S. NAVY, BUREAU OF SUPPLIES & ACCOUNTS  
COMM. NAVY DESIGN DIVISION  
BETHESDA, M.D.  
SPACE NUMBER 1/2-3 L&E



COMMISSARY RESEARCH DIVISION

Clean Dish Table

Dimensions as indicated.



Specifications

Stainless Steel, 14 ga., 18-8 grade throughout, No. 4 polished finish. All welded corners and joints to be ground and polished to original finish of remaining surfaces.  
Framework - 1-1/2" x 1-1/2" x 1/4" angles, electrically welded.  
Legs, 2-1/2" diam., pipe, adjustable.  
Doors, cabinet, sliding, reinforced, sanitary track, roller bearings, removable, with handles.  
Shelf, intermediate, in cabinet section.  
Undershelf, open, securely supported 12" above floor to pipe legs.  
Rim and splash back, height as indicated, rolled rim, 360° all sides.  
Legs on open table area attached to underside of table with reinforcing channel braces bolted to gussets of the same material. Bolts through gussets and legs to be slotless head type.  
Cabinet section accessible from both sides, similar doors in rear side.

A technical drawing of a stainless steel table. The drawing includes a perspective view of the entire table, showing its rectangular top, four legs, and a row of drawers on the right side. Below the main table, there is a detailed view of the drawer assembly, showing three drawers with handles. The drawing is labeled with 'Essential Dimensions' and 'Construction Details'.

#### Essential Dimensions:

Table: 27" wide x 34" high x 10' long

Drawers: 20" wide x 5" high x 20" long

Tilting Bins: 18" wide

Overhead Shelf: 10" wide x 22" high x 10' long

Lower Shelf: 12" above deck

Spice Bins: 5 1/2" wide x 6" deep x 9" long

Legs: Pipe 2 1/2" diameter, adjustable

12" high under drawer section.

#### Construction Details

Stainless Steel, 14 ga., No. 4 Polished Finish, throughout.  
Top and lower shelf have 1 1/2" x 1/2" x 1/4" all rim.  
All nosed corners on all sides.

Welded corners and joints to be ground and polished to  
original finish of remaining surfaces.

Angle framework of 1-1/2" x 1-1/2" x 1/4" angles,  
electrically welded.

Overhead shelf shall be open in rear. Both overhead and  
lower shelf shall be supported by angle framework.

Legs are 2-1/2" Stainless Steel pipe, adjustable.

12" high under drawer section.

Stainless Steel, 16 ga., No. 11 polished finish, throughout.  
Top and lower shelf have 1 1/2" x 3/8" all rim.  
Full nosed corners on all sides.  
All welded corners and joints to be ground and polished to  
original finish of remaining surfaces.  
Body framework of 1-1/2" x 1-1/2" x 1/4" angles,  
electrically welded.  
Overhead shelf shall be open in rear. Both overhead and  
lower shelf shall be supported by angle framework.  
Legs are 2-1/2" Stainless Steel pipe, adjustable.  
360° swivel casters 1 1/2" diameter, 5" wheels, 2" casters, 2" wheels.



COMMISSARY RESEARCH DIVISION

Service Counter, with Lower Shelf

Figure VII

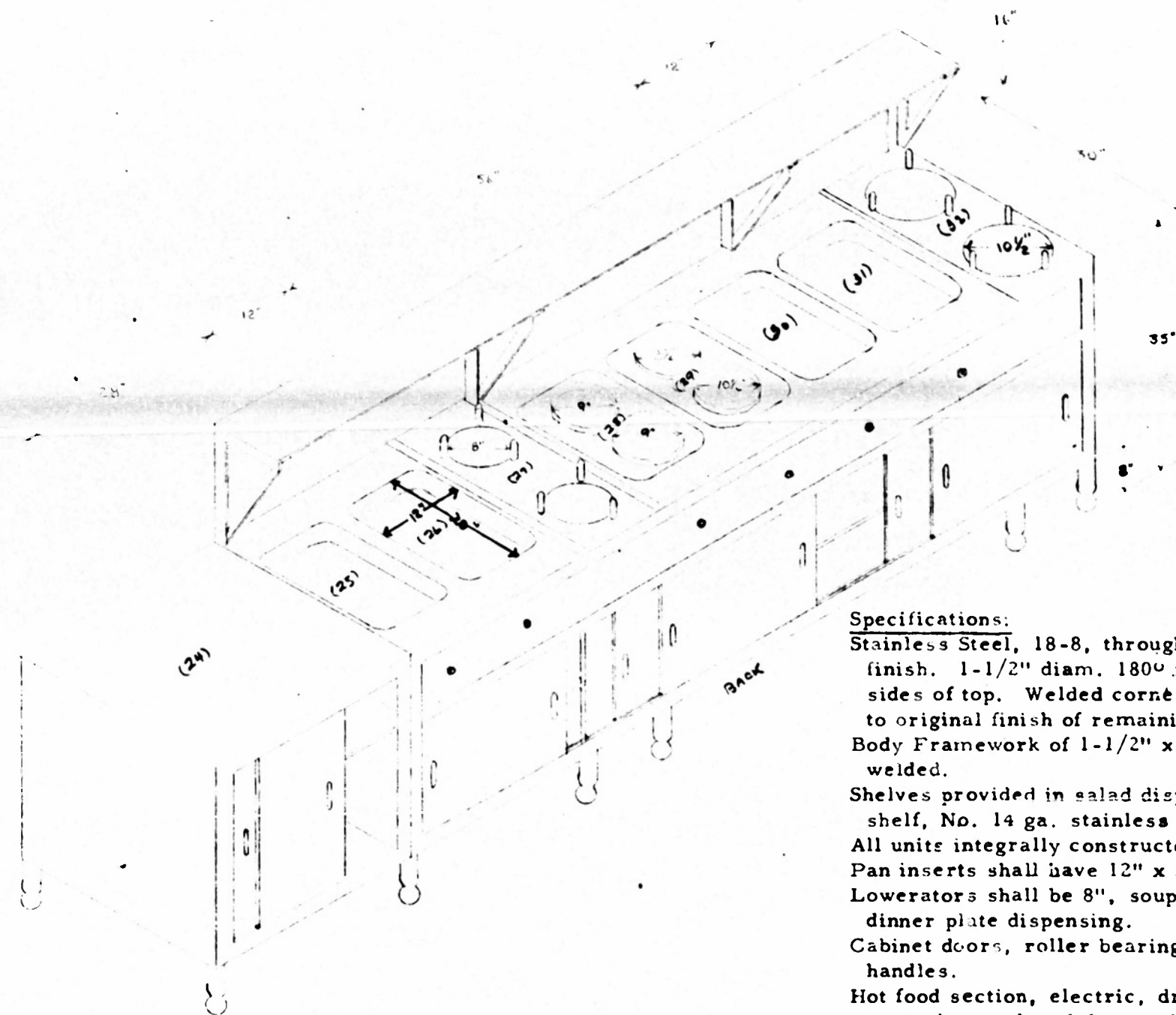


Figure VII

Specifications:

Stainless Steel, 18-8, throughout. No. 14 ga. No. 4 polished finish. 1-1/2" diam. 180° roll rim, bullnose corners on all sides of top. Welded corners and joints ground and polished to original finish of remaining surface.

Body Framework of 1-1/2" x 1-1/2" x 1/4" angles, electrically welded.

Shelves provided in salad display table and in steam table under-shelf, No. 14 ga. stainless steel.

All units integrally constructed.

Pan inserts shall have 12" x 20" openings.

Lowerators shall be 8", soup bowl dispensing, and 10-1/2" for dinner plate dispensing.

Cabinet doors, roller bearing, sliding, sanitary track, recessed handles.

Hot food section, electric, dry heat type, individual thermostatic controls, enclosed deep well units, master cut-off switch, individually insulated compartments, heat control from 125° to 275°F.

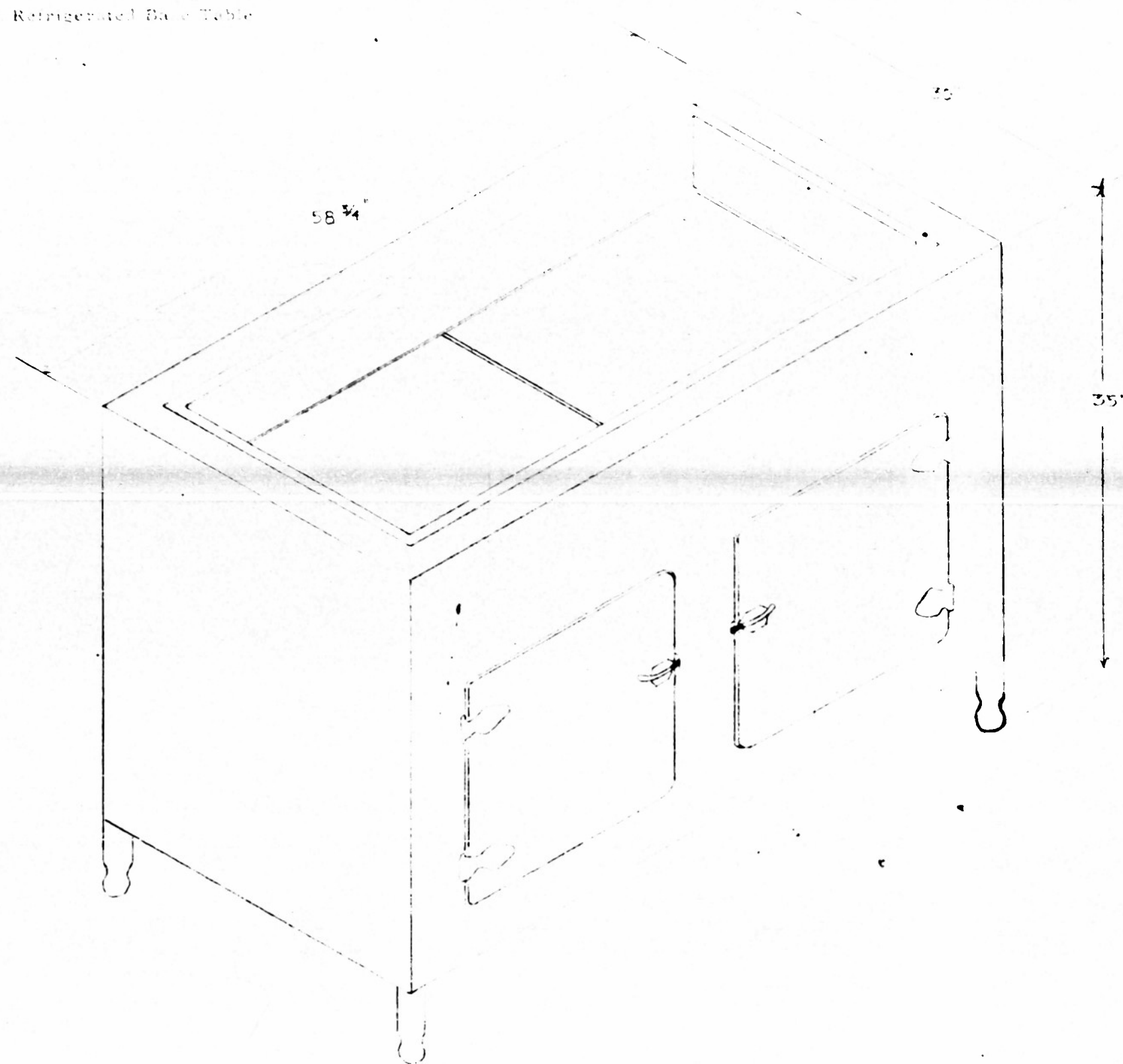
Legs, pipe, 2-1/2" diam. stainless steel, adjustable.

Counter shelf, open, supported by stainless steel angle braces.

COMMISSARY RESEARCH DIVISION

Cold Pan with Refrigerated Base Table

Drawn by [illegible]



Specification, Cold Pan  
with Refrigerated Base

Stainless steel throughout  
14 ga. 18-8, No. 4 pol-  
ished finish. All welded  
corners and joints to be  
ground and polished to  
original finish of remain-  
ing surfaces.

Body framework of 1-1/2  
x 1-1/2" x 1/8" angles,  
electrically welded.

Legs shall be 3" high,  
stainless steel, adjust-  
able.

Dimensions, Overall-  
58-3/4" long x 30" deep  
x 35" high.

Cold Salad Pan shall be  
designed for mechan-  
ical refrigeration with  
copper tube refrigerat-  
ed coils embedded in  
insulation against stain-  
less steel bottom of pan  
with tubing extending  
below bottom of pan for  
connections to com-  
pressor, valves and  
controls.

Grates to be 14 ga. per-  
forated, removable.

Refrigerated base insu-  
lated with 3" approved in-  
sulation, lined on in-  
terior with stainless  
steel, fitted with waste  
outlet, floor rack and  
stainless steel center  
shelf. Refrigerator  
fin coil for connection,  
as above. Interior  
stainless steel 2B  
finish.

Refrigerator door, over-  
lapping, closing on rub-  
ber tubular gaskets.  
Chrome-plated hinges  
and catches with pro-  
vision for locking.

COMMISSARY RESEARCH DIVISION, USNCRDV

ALAD AND SANDWICH PREPARATION UNIT

40" long x 30" wide x 35" high.

18-g stainless steel throughout.

Top braced internally and removable, furnished with 2" thick, sectional maple cutting board; provided with four 12"x3", four 9"x3"x3", one 18"x12"x3" stainless steel insets. Insets shall set on a stainless steel contact plate with curved edges.

Understructure insulation 2" thick, lined with stainless steel, 18 ga.

Refrigerator door panels of 14 ga. stainless steel, welded seamless construction with rounded corners.

Ice compartment shelf lined with 18 ga. stainless steel; crumb drawer provided.

Legs 8" high, adjustable, stainless steel pipe, with ball feet.

Exterior front, ends, bottom, and rear of 14 ga. stainless steel.

Interior of refrigerator section furnished with removable stainless steel shelves.

